

# Phase 1 Trimble County Landfill & CCRT Project Quarterly Report – Update #31 October 30, 2023

#### **Executive Summary**

This report covers LG&E and KU's ("Companies") progress on the Phase 1 Trimble County Landfill and CCRT<sup>1</sup> Project through the third quarter of 2023. This report does not include many previously reported status completion milestones as the Project is essentially completed. This report will cover only the minor balance of plant scope activities including but not limited to engineering of Phase 1b, installation of haul road guard rails, cleanout of stormwater pond, and perimeter fencing on recently acquired land reported herein.

Safety performance to date remains excellent with an Inception-to-Date OSHA Recordable Incident Rate of 0.54 compared to the industry average of 3.2, and 0.54 as reported for the project in the last report. The 2023 Year-to-Date Rate is 0.00.

The project's total forecasted cost remained \$316.9 million (net) as reported last quarter, compared to \$321.9 million (net) as provided in Case No. 2015-00194. Total spend-to-date slightly increased from \$316.5 million (net), as reported last quarter, to \$316.8 million through September 30, 2023.

## **Landfill Quarterly Status Update**

GAI Consultants ("GAI") Owner Engineer activities for the landfill this quarter included engineering work associated with Phase 1b. This engineering work included a conceptual redesign for Phase 1b and drafting a permit modification. This engineering work is anticipated to be completed in the fourth quarter of 2023.

WSP engineering activities for the landfill this quarter included revising numerous drawings to reflect asbuilt conditions. This engineering work is anticipated to be completed in the fourth quarter of 2023.

Tetra Tech ("TT") completed all of their minor scope items and began addressing punch list items, anticipated to be completed in the fourth quarter of 2023.

The security fence and bus turn around project was competitively bid and awarded to TT, which plans to mobilize to the site in October 2023. This project includes fencing easily accessible property that was acquired for future borrow material for the landfill. The project also includes installing "no trespassing" signs and a bus turn-around along a dead-end road. This project is anticipated to be completed in the first quarter of 2024.

The engineering of a truck tire wash system has been awarded to QK4. This tire wash system will assist in controlling fugitive dust as well as keeping local and haul roads free of mud. The engineering work of this

<sup>&</sup>lt;sup>1</sup> The Coal Combustion Residuals Treatment ("CCRT") subproject scope is described in detail in the Appendix found on page 5.



project is anticipated to be completed in the fourth quarter of 2023, while construction is anticipated to be completed during the second quarter of 2024.



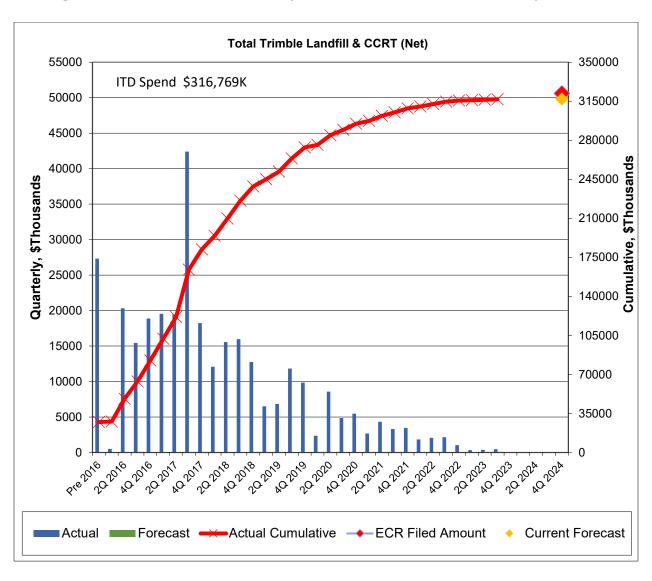


CCR Landfill Overview – View Looking North – June 2023 – No Changes



#### **Financials**

The project's total forecasted cost remained \$316.9 million (net) as reported last quarter, compared to \$321.9 million (net) as provided in Case No. 2015-00194. Total spend-to-date increased slightly from \$316.5 million (net) as reported last quarter to \$316.8 million (net) through September 30, 2023. Notes for the graph below: (1) includes a symbol ( $\diamondsuit$ ) to show the current forecast to completion, (2) Inception-to-Date ("ITD") Spend is shown in the upper left corner, and (3) the cash flow now incorporates the delays from all past weather events and differences in geotechnical "as found" conditions to bid geotechnical data.





# **Planned Activities for Next Quarter**

## Landfill

Close out of the BOP activities including but not limited to engineering of Phase 1b, construction of a platform to access valves at Haul Road Stormwater pond, and perimeter fencing on recently acquired land.



#### **APPENDIX**

## Scope

The Trimble County Landfill and CCRT Project scopes include: CCR Treatment facilities, CCR Transport system, and Phase 1 of a dry CCR landfill.

The CCR Treatment facilities include the Unit 1 bottom ash dewatering system, conversion of station Fly Ash Transport from wet to dry conveyance, Fly Ash storage and treatment equipment and the station Gypsum Dewatering System and associated Gypsum storage/reclaim system. The CCR Transport system includes a pipe conveyor (approximately 1.5 miles) from the CCR Treatment area to the landfill location, a bridge over KY 1838, and a road from the station to the new dry CCR landfill. The CCR landfill includes Phase 1 of a new dry CCR landfill that is designed to receive and manage CCR generated over approximately 37 years. The landfill will be developed in multiple phases with each fully integrated as an extension of the adjacent landfill phase or cell. Only Phase 1 is included in the CCRT and Landfill project. The certificate of public convenience and necessity for this project was awarded in Case Nos. 2009-00197 and 2009-00198 and affirmed in Case No. 2015-00194.

### **Previously Reported Contract Awards**

The CCRT Owner's Engineer contract was awarded to Burns & McDonnell ("B&McD"). B&McD has supported various projects for LG&E and KU, and recently supported the Trimble County Unit 1 PJFF capital project. B&McD assisted in the specification development for the CCRT and bottom ash scopes of work and assisted in the bid evaluations and EPC finalization.

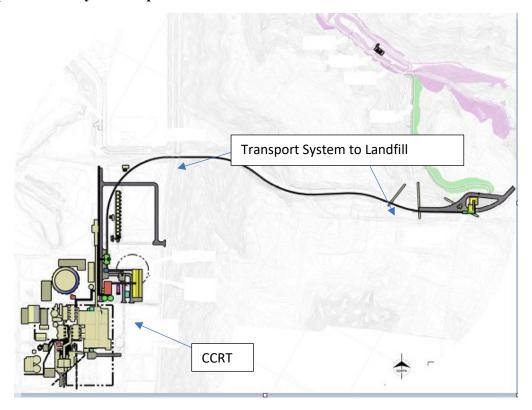
The Landfill Owner's Engineer contract was awarded to GAI. GAI has been the Engineer of Record through the permitting and landfill design phases, as well as the engineering firm that developed the specifications for the road and bridge work.

The CCRT and Transport portion of the project was awarded to AMEC. An EPC was executed with AMEC on April 7, 2016. AMEC has performed very well for the Companies in the recent past with completion of the E.W. Brown Unit 3 and Trimble County Unit 1 baghouse projects. AMEC was also awarded the CCR Rule Process Water System projects for Trimble County and Mill Creek generating stations.

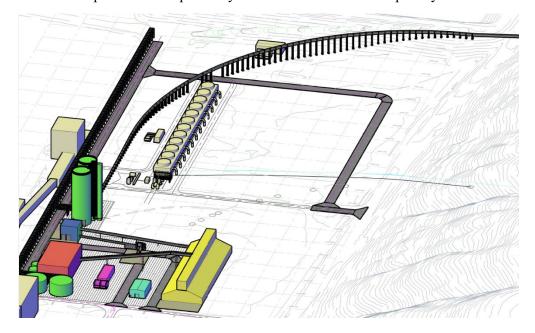
The Phase 1 Landfill portion of the project was awarded to Charah. Charah has previously completed successful projects for the Companies, such as the Ghent and E.W. Brown Landfill Phase 1 projects.



# **Conceptual Site Layout Graphics**



Graphic 1 - Conceptual Layout of the CCRT and Transport System



Graphic 2 - Conceptual 3D Site Layout of the CCRT



**Table 1 - Landfill Permitting Status** 

Required Regulatory Permit	<b>Submitted</b>	Date Submitted	Date Received
Kentucky Division of Waste Management Landfill Permit	Yes	January 3, 2014	February 2017
US Army Corps of Engineers 404 Permit	Yes	April 25, 2014	June 28, 2017
US Army Corps of Engineers Nationwide Permit (Monitoring Wells)	Yes	September 9, 2013	September 2014
Kentucky Division of Water 401 Water Quality Certificate	Yes	April 25, 2014	October 24, 2016
Kentucky Division of Water Dam Safety Permit	Yes	<u>February 15, 2016</u>	<u>August 2016</u>
Kentucky Transportation Cabinet Bridge Permit	Yes	January 30, 2014	February 2015
Kentucky Division for Air Quality Title V Revised Air Permit	Yes	October 12, 2015	December 2015

Note: The underlined dates reflect updates from Application Exhibit 3 in Case No. 2015-00156 filed on May 22, 2015, which the Commission, by order, later consolidated into Case No. 2015-00194.

# Table 2 - CCRT & Transport Quarterly Status Update

The procurement and construction status for the CCRT subprojects are summarized in the table below:

Equipment	Awarded Contractor	Status	
Unit 1 Bottom Ash Submerged Chain Conveyor	United Conveyor Corporation	Placed into Commercial Operation in November 2017	
Fly Ash Conditioner and Conveying System	United Conveyor Corporation	Placed into Commercial Operation in April 2019	
Gypsum Dewatering Vacuum Belt Filter System	FLSmidth	Placed into Commercial Operation in April 2019	
Gypsum Portal Scraper Reclaimer	Ameco (same vendor as Ghent's portal reclaimer commissioned in December 2014)	Placed into Commercial Operation in April 2019	
Pipe Conveyor	Beumer Group (same vendor as Ghent's pipe conveyor commissioned in December 2014)	Placed into Commercial Operation in January 2020	